

Practitioner's Docket No. **2793C/116****PATENT****IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of: Patrovsky, H.  
International Application No.: PCT/CA2005/000097      Group No.: 1753  
Filed: July 31, 2006      Examiner: Not Yet Assigned  
For: **NITRIDING METHOD FOR IMPROVING SURFACE CHARACTERISTICS  
OF COBALT-CHROMIUM BASED ALLOYS**

**Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450**

**TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT  
WITHIN THREE MONTHS OF FILING OR  
BEFORE MAILING OF FIRST OFFICE ACTION (37 C.F.R. § 1.97(b))**

**IDENTIFICATION OF TIME OF FILING THE ACCOMPANYING  
CERTIFICATION UNDER 37 C.F.R. " 1.8(a) and 1.10\***

*(When using Express Mail, the Express Mail label number is mandatory;  
Express Mail certification is optional.)*

I hereby certify that, on the date shown below, this correspondence is being:

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**37 C.F.R. § 1.8(a)**

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**TRANSMISSION**

☐ facsimile transmitted to the Patent and Trademark Office, (703) \_\_\_\_\_ - \_\_\_\_\_.

**Signature**



Date: August 6, 2007

**Timothy M. Murphy**

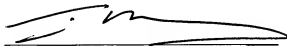
*(type or print name of person certifying)*

\* Only the date of filing (" 1.6) will be the date used in a patent term adjustment calculation, although the date on any certificate of mailing or transmission under " 1.8 continues to be taken into account in determining timeliness. See " 1.703(f). Consider "Express Mail Post Office to Addressee" (" 1.10) or facsimile transmission (" 1.6(d)) for the reply to be accorded the earliest possible filing date for patent term adjustment calculations.

### INFORMATION DISCLOSURE STATEMENT

The information disclosure statement submitted herewith is being filed within three (3) months of the filing date of the application or date of entry into the national stage of an international application or before the mailing date of a first Office action on the merits, whichever event occurs last. 37 C.F.R. § 1.97(b).

DATE: August 6, 2007



Timothy M. Murphy  
BROMBERG & SUNSTEIN LLP  
Customer Number 02101  
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Boston, MA 02110-1618  
US

2793C/00116 581894.1

Practitioner's Docket No.: 2793C/116**PATENT****IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of: Petrovsky, H.  
International Application No.: PCT/CA2005/000097      Group No.: 1753  
Filed: July 31, 2006      Examiner: Not Yet Assigned  
For: **NITRIDING METHOD FOR IMPROVING SURFACE CHARACTERISTICS OF COBALT-CHROMIUM BASED ALLOYS**

**Attn: Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450**

**INFORMATION DISCLOSURE STATEMENT**

(Information Disclosure Statement--Page 1 of 8)

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**CERTIFICATION UNDER 37 C.F.R. SECTIONS 1.8(a) and 1.10\****(When using Express Mail, the Express Mail label number is mandatory;**Express Mail certification is optional.)*

I hereby certify that, on the date shown below, this correspondence is being:

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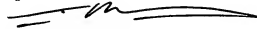
**37 C.F.R. SECTION 1.8(a)****37 C.F.R. SECTION 1.10\***

☐ with sufficient postage as first class mail.

☐ as "Express Mail Post Office to Addressee"  
Mailing Label No. **EV626471958US**

**TRANSMISSION**

☐ transmitted by facsimile to the Patent and Trademark Office.

**Signature**Date: August 6, 2007**Timothy M. Murphy***(type or print name of person certifying)*

**\*WARNING:** Each paper or fee filed by "Express Mail" **must** have the number of the "Express Mail" mailing label placed thereon prior to mailing. 37 C.F.R. section 1.10(b).

"Since the filing of correspondence under section 1.10 without the Express Mail mailing label thereon is an oversight that can be avoided by the exercise of reasonable care, requests for waiver of this requirement will not be granted on petition." Notice of Oct. 24, 1996, 60 Fed. Reg. 56,439, at 56,442.

NOTE: "An information disclosure statement shall be considered by the Office if filed by the applicant:

- (1) Within three months of the filing date of a national application;
- (2) Within three months of the date of entry of the national stage as set forth in section 1.491 in an international application; or
- (3) Before the mailing date of a first Office action on the merits, whichever event occurs last." 37 C.F.R. section 1.97(b).

NOTE: "Each individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability as defined in this section." 37 C.F.R. section 1.56(a).

"Individuals associated with the filing or prosecution of a patent application within the meaning of this section are:

- (1) each inventor named in the application;
- (2) each attorney or agent who prepares or prosecutes the application; and
- (3) every other person who is substantively involved in the preparation or prosecution of the application and who is associated with the inventor, with the assignee or with anyone to whom there is an obligation to assign the application." 37 C.F.R. section 1.56(c).

NOTE: The "duty as described in section 1.56 will be met so long as the information in question was cited by the Office or submitted to the Office in the manner prescribed by sections 1.97(b) - (d) and 1.98 before issuance of the patent." Notice of January 9, 1992, 1135 O.G. 13-25 at 17.

WARNING: "No information disclosure statement may be filed in a provisional application." 37 C.F.R. section 1.51(b).

### List of Sections Forming Part of This Information Disclosure Statement

The following sections are being submitted for this Information Disclosure Statement:

(check sections forming a part of this statement: discard unused sections and number pages consecutively)

1. ☒ Preliminary Statements
2. ☒ Forms PTO/SB/08A and 08B (substitute for Form PTO-1449)
3. ☐ Statement as to Information Not Found in Patents or Publications
4. ☐ Identification of Prior Application in Which Listed Information Was Already Cited and for Which No Copies Are Submitted or Need Be Submitted
5. ☐ Cumulative Patents or Publications
6. ☒ Copies of Listed Information Items Accompanying This Statement
7. ☐ Concise Explanation of Non-English Language Listed Information Items
  - 7A. ☒ International Search Report
  - 7B. ☐ English Language Version of International Search Report
8. ☐ Translation(s) of Non-English Language Documents
9. ☐ Concise Explanation of English Language Listed Information Items (Optional)
10. ☒ Identification of Person(s) Making This Information Disclosure Statement

NOTE: "Once the minimum requirements are met, the examiner has an obligation to consider the information." Notice of April 20, 1992 (1138 O.G. 37-41, 37).

(Information Disclosure Statement--Page 2 of 8)

### Section 1. Preliminary Statements

Applicants submit herewith patents, publications or other information, of which they are aware that they believe may be material to the examination of this application, and in respect of which, there may be a duty to disclose.

The filing of this information disclosure statement shall not be construed as a representation that a search has been made (37 C.F.R. section 1.97(g)), an admission that the information cited is, or is considered to be, material to patentability, or that no other material information exists.

The filing of this information disclosure statement shall not be construed as an admission against interest in any manner. Notice of January 9, 1992, 1135 O.G. 13-25, at 25.

## SECTION 2. FORMS PTO/SB/08A and 08B (formerly Form PTO-1449)

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Petrovsky, H. Attorney Docket: 2793C/116  
 Serial No: PCT/CA2005/000097 Art Group Unit: 1753  
 Date Filed: July 31, 2006 Examiner Name: Not Yet Assigned  
 Invention: NITRIDING METHOD FOR IMPROVING SURFACE CHARACTERISTICS OF  
 COBALT-CHROMIUM BASED ALLOYS

LIST OF PATENTS AND PUBLICATIONS FOR  
APPLICANT'S INFORMATION DISCLOSURE STATEMENT

| U.S. PATENT DOCUMENTS |                  |                 |             |                |                |
|-----------------------|------------------|-----------------|-------------|----------------|----------------|
| Examiner Initials     | Reference Number | Document Number | Issue Date  | Inventor       | Class/Subclass |
|                       | AA               | US 5,308,412    | May 3, 1994 | Shetty, et al. | 148/238        |
|                       | AB               | US 5,208,412    | May 4, 1993 | Hoshino        | 84/413         |

| OTHER DOCUMENTS   |                  |                                   |   |
|-------------------|------------------|-----------------------------------|---|
| Examiner Initials | Reference Number | Author                            | Title of Article, Title of Journal, Volume Number, Page Numbers, Date   |
| /J.M./            | AC               | Alves, C., et al.                 | "The Effect of Pulse Width on the Microstructure of d.c.-Plasma-Nitrided Layers", Surface and Coatings Technology, Vol. 122, No. 2-3 (Pp. 112-117), Dec. 15, 1999.  |
| /J.M./            | AD               | Blawert, C., et al.               | "Surface Treatment of Nitriding Steel 34CrAlNi7; A Comparison Between Pulsed Plasma Nitriding and Plasma Immersion Ion Implantation", Surface and Coatings Technology, Vol. 98, No. 1-3 (Pp. 1181-1186), Jan. 1998. |
| /J.M./            | AE               | Kim, Y.S., et al.                 | "Plasma Diffusion Treatment of Stellite", Surface and Coatings Technology, Vol. 74-75, No. 1-3 (Pp. 425-430), Sept. 1, 1995   |
| /J.M./            | AF               | Tek, Z., et al.                   | "Comparison of the Mechanical Properties of Nitrogen Ion Implantation and Micro-Pulsed Plasma Nitriding Techniques of Cr-Ni Alloy", Surface and Coatings Technology, Vol. 158-159 (Pp. 157-163) Sept. 1, 1992.      |
| /J.M./            | AG               | International Searching Authority | International Search Report, dated June 2, 2005   |

(Information Disclosure Statement--Page 4 of 8)

Applicants: Petrovsky, H. Attorney Docket: 2793C/116  
Serial No: PCT/CA2005/000097 Art Group Unit: 1753  
Date Filed: July 31, 2006 Examiner Name: Not Yet Assigned  
Invention: **NITRIDING METHOD FOR IMPROVING SURFACE CHARACTERISTICS OF  
COBALT-CHROMIUM BASED ALLOYS**

**LIST OF PATENTS AND PUBLICATIONS FOR  
APPLICANT'S INFORMATION DISCLOSURE STATEMENT**

Examiner Signature: /Joseph Miller, Jr/

Date Considered: 03/30/2010

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if *not* in conformance and not considered. Include copy of this form with next communication to applicant.

**Section 6. Copies of Listed Information Items Accompanying This Statement**

*NOTE: 37 C.F.R. section 1.98(a)(2) requires that any information disclosure statement filed under section 1.97 shall include: "A legible copy of: (i) Each U.S. and foreign patent; (ii) Each publication or that portion which caused it to be listed; and (iii) All other information or that portion which caused it to be listed, except that no copy of a U.S. patent application need be included. . ."*

*NOTE: The wording in section 1.98(a)(2)(iii) makes it clear that the requirement to submit a copy of each item of information listed in an information disclosure statement does not apply to the citation of a U.S. patent application. Notice of January 9, 1992, 1135 O.G. 13-25, at 14.*

Legible copies of all items listed in Forms PTO/SB/08A and 08B (substitute for Form PTO-1449) accompany this information statement.

*(complete the following, if applicable)*

☒ Exception(s) to above:

U.S. patent citations are not included pursuant to the United States Patent and Trademark Office's September 21, 2004 waiver of the copy requirement in 37 CFR 1.98 for cited pending U.S. patent citations when the patent citations are available in the USPTO's IFW system.

☐ Items in prior application, from which an earlier filing date is claimed for this application, as identified in Section 4.

☐ Cumulative patents or publications identified in Section 5.



**Section 7A. Concise Explanation of Non-English Language Listed Information Items in EPO Search Report**

The relevance with respect to the following citations listed on Forms PTO/SB/08A and 08B (substitute for PTO-1449):

is submitted on the basis of the accompanying:

*(check the appropriate item)*

☒ EPO search report that is in the English language,

☐ EPO search report that is not in the English language and that is accompanied also by an English language version of the EPO search report, that issued on the corresponding European patent application.

**Section 10. Identification of Person(s) Making This Information Disclosure Statement**

The person making this certification is

*(check each applicable item)*

- (a)
- ☐
- the inventor(s) who signs below

\_\_\_\_\_  
SIGNATURE OF INVENTOR\_\_\_\_\_  
*(type name of inventor who is signing)*

- (b)
- ☐
- an individual associated with the filing and prosecution of this application (37 C.F.R. section 1.56(c))

\_\_\_\_\_  
SIGNATURE OF INVENTOR\_\_\_\_\_  
*(type name of inventor who is signing)*

- (c)
- ☒
- the practitioner who signs below on the basis of the information:

*(check each applicable item)*☐ supplied by the inventor(s).☐ supplied by an individual associated with the filing and prosecution of this application. (37 C.F.R. section 1.56(c)).☒ in the practitioner's file.  
\_\_\_\_\_  
SIGNATURE OF PRACTITIONER\_\_\_\_\_  
Timothy M. Murphy\_\_\_\_\_  
*(type or print name of practitioner)*Reg. No.: 33,198

Tel. No.: (617) 443-9292

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P.O. Address

Customer No.: 002101

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Boston, MA 02110-1618

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